



# Army Transforming America

## *Engineering a Modern Nation*

Is it a paradox that a force organized for national defense should also be responsible for some of the greatest civil works in America's history? Not when you see that as the Army protected the nation's expanding frontiers, its engineers were busy surveying the transportation routes, digging the canals and building the bridges that made that expansion possible. Over time, the Army has also erected some of the nation's most important public buildings, helped contain the flow of its mightiest rivers and provided an infrastructure that helped shape America's economic future.

In the early 19th century, for instance, the Army helped build the Chesapeake and Ohio Canal; extended the Cumberland Road westward; and contracted to clear impediments to navigation on the Ohio and Mississippi Rivers. In 1827 an Army Engineer officer, George Whistler, supervised construction of the Baltimore and Ohio Railroad, a direct competitor to the C&O Canal. Through 1855, virtually every railroad built in the United States depended in some measure on military surveys.

Army engineers later aided the nation's capital. In the mid-1850s, LT Montgomery C. Meigs designed an aqueduct system that has supplied drinking water to Washington, D.C., for generations. LTC Thomas L. Casey lent his expertise to completing the Washington Monument. Soldiers assembled numerous bridges spanning the Potomac River and carved out the George Washington Memorial Highway linking the District with Mount Vernon, Va.

The Army's assistance to the Panama Canal Commission in the early 1900s helped fundamentally improve world trade patterns. COL George W. Goethal oversaw this construction task that moved almost 267 million cubic yards of earth to link the Pacific and Atlantic oceans. Back home, Army engineers constructed lighthouses to ease navigation by coastal and oceangoing vessels. Their many contributions culminated with the American portion of the St. Lawrence Seaway, which unites the industrial potential of the Great Lakes region with the maritime commerce of the world.

Through levees and dams, Army engineers tamed unruly rivers, thereby preventing billions of dollars of flood damage. The dams are especially useful, providing flood control, irrigation, navigation, water supply and recreation to millions of Americans. In addition, by 1975 such Corps of Engineers projects produced 24 percent of the nation's total hydroelectric power. The list of public works completed by Army engineers goes on and on and on — to the point that it's hard to imagine how America would look today without them. — *CPT Patrick Swan*